

WORKING WITH MATHEMATICALLY GIFTED STUDENTS: SCHOOL INVENTORY OF PRACTICES

Purpose	School mathematics leaders and/or groups of teachers can use this self-assessment inventory to consider whether or not they are implementing all the practices that might engage and challenge students who are gifted in mathematics. If teachers have questions about the items in the inventory, they can review the various media pieces below that address how to work with mathematically gifted students.
Materials	None
Media	<i>Developing a Mastery Framework</i> , multimedia overview. (8:41) <i>Acceleration for Mathematically Gifted Students</i> , audio interview with teacher from Longfellow Middle School. (5:24)
Topic	National Math Panel: Critical Foundations for Algebra
Practice	Mastery Framework

School Inventory of Practices: Working with Mathematically Gifted Students

This checklist is designed for school mathematics leaders and teachers to use for reflection on how they are currently supporting students who are mathematically gifted and ready for additional challenges. When several teachers complete the inventory, it can also be used as a basis for a discussion, sharing about current practices, and pooling resources.

Has the school. . .	Have done this	Could use more ideas	Need support to do this	Improvement Action
1. Identified students who are mathematically gifted, i.e. by reviewing recommendations, teacher rating scales, and test data?				
2. Offered additional and/or different instructional programs that reflect more formal mathematics to gifted students, e.g., more rigorous or accelerated courses for advanced students?				
3. Provided enrichment opportunities, including math contests and supplementary activities?				
4. Identified teachers with content expertise to design accelerated or enrichment programs for mathematically gifted students?.				
5. Articulated courses for gifted students with secondary school mathematics courses of study so that students receive credit for courses and are able to continue to follow an accelerated sequence?				
6. Provided teachers with training or support that enables them to plan instruction at levels of complexity and breadth appropriate for gifted students?				
7. Investigated assessment/ grading criteria to reflect perseverance with challenging mathematics?				

As a teacher, have you. . .	Have done this	Could use more ideas	Need support to do this	Improvement Action
1. Differentiated instruction to provide more challenging or complex problems for gifted students?				
2. Provided gifted students with opportunities to work with mathematically gifted peers to solve problems and learn how others work through challenges?				
3. Provided opportunities for accelerated individualized instruction, including via computer instruction?				
4. Encouraged students to study a topic in more depth or to find more sophisticated ways to solve problems?				
5. Provided gifted students with the opportunity and time to pursue study of a mathematical subject or interest?				
6. Encouraged gifted students to present a topic or explain a solution to a complex problem to the teacher and to other students?				
7. Acknowledged gifted students' willingness to persist when working on difficult problems?				